

other genera, where the animals periodically repeat the expansion, leaving on the shells a succession of the varices and other developments, which mark each successive expansion and degeneration of the animal.

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XLIII.—*Descriptions of six newly discovered Species and Characters of a new Genus of Araneidea.* By JOHN BLACKWALL, F.L.S.

Tribe Octonoculina.

Family THOMISIDÆ.

Genus THOMISUS, Walck.

*Thomisus Cambridgii.*

Length of the female  $\frac{3}{10}$ ths of an inch; length of the cephalothorax  $\frac{1}{8}$ ; breadth  $\frac{1}{10}$ ; breadth of the abdomen  $\frac{3}{10}$ ; length of an anterior leg  $\frac{7}{10}$ ; length of a leg of the third pair  $\frac{1}{4}$ .

The eyes are disposed on the anterior part of the cephalothorax in two transverse, curved rows, forming a crescent whose convexity is directed forwards; the eyes of each lateral pair, which are seated on a tubercle, are larger than the intermediate ones, those of the anterior row being the largest of the eight. The cephalo-thorax is large, convex, compressed before, rounded on the sides, broadly truncated in front, depressed anteriorly, still more abruptly so towards the base, and has a small indentation in the medial line; the sides are of a brown colour marbled with yellowish-white, and on the posterior part of each there is an oval black patch, with its smaller extremity directed forwards, whose outer margin is broken by a yellowish-white spot; the lateral margins and a large band extending along the middle are of a yellowish-white colour, the latter, immediately behind the eyes, being tinged with brown and marked with spots and two short, parallel streaks of a deeper shade; a short, curved, black line occurs near each side, below the lateral eyes, and the frontal margin is fringed with a row of strong black hairs directed forwards. The falcæ are short, powerful, cubconical, vertical, and of a yellowish-white colour in front; the base, outer side, and extremity having a brownish-black hue. The maxillæ are somewhat pointed at the extremity, and inclined towards the lip, which is triangular, but rounded at the apex; and the sternum is heart-shaped. These parts are of a pale brownish-yellow colour, the base of the lip, that of the maxillæ on the inner side, and minute spots on the sternum, having a dark brown hue. The legs are provided with hairs and spines, two longitudinal rows of the latter occurring on the inferior surface of the tibiæ


and metatarsi of the first and second pairs; they are of a brownish-yellow colour, the tarsi having a tinge of red, and are marked with streaks, spots, and annuli of a brownish-black hue; the first and second pairs, which are longer and more robust than the third and fourth pairs, are equal in length, and the third pair is the shortest; each tarsus is terminated by two curved, pectinated claws; and the short palpi, which resemble the legs in colour, but are very slightly marked with brownish-black, have a curved, pectinated claw at their extremity. The abdomen is broader at the posterior than at the anterior extremity, sparingly clothed with short hairs, convex above, and projects over the base of the cephalo-thorax; the upper part is of a dull reddish-brown colour, with obscure, slightly oblique lines of a paler hue, and is marked with seven minute, indented, yellowish-white spots describing an elongated angle whose vertex is directed forwards; a short, fusiform line, of the same hue, extends along the middle from the spot forming the vertex of the angle a little beyond the two spots constituting the second pair; the anterior extremity, sides, a space above the spinners, and the under part, are of a pale brownish-yellow colour; on the first there is a curved black band extending to the anterior part of the sides, which are marked with oblique, imperfectly defined, black streaks, and on the posterior extremity spots of the same hue are disposed in longitudinal rows; the under part is minutely spotted with brown, and a brown line on each side of the middle region extends to the spinners, the superior and inferior pairs of which have the second joint of a dark brown hue; the colour of the sexual organs and branchial opercula is reddish-brown, and immediately below each of the latter there is an irregular black spot.

In February 1858, Mr. R. H. Meade forwarded to me this fine species of *Thomisus*, which I have named in compliment to Octavius P. Cambridge, Esq. of Bloxworth House, near Blandford in Dorsetshire, by whom it was captured in that county in the autumn of 1857. Mr. Cambridge, who is a zealous entomologist, having latterly directed his attention to the *Araneida*, has discovered several species new to science, and others which, though previously known to arachnologists, had not been recorded as indigenous to Britain. My thanks are due to Mr. Cambridge for kindly permitting me to give publicity to these discoveries.

#### Genus PASITHEA, Blackw.

*Eyes* eight, unequal in size, disposed in three transverse rows on the anterior part of the cephalo-thorax; the two smallest, constituting the anterior row, are near to each other, but not

in contact; each of the two largest, forming the intermediate row, is seated on a tubercle; and the other four constitute the posterior row, which is curved, and has its convexity directed backwards. The entire group describes a sector of a circle

whose radii converge towards the frontal margin, thus 

*Maxilla* long, dilated at the base, obliquely truncated at the extremity, on the outer side, and inclined towards the lip, beyond which they extend considerably. *Lip* triangular, but notched at the extremity. *Legs* very long and slender; the first pair is the longest, then the second, and the third pair is the shortest.

*Pasithea viridis.*

Length of the male  $\frac{7}{16}$ ths of an inch; length of the cephalo-thorax  $\frac{5}{16}$ ; breadth  $\frac{5}{20}$ ; breadth of the abdomen  $\frac{1}{10}$ ; length of an anterior leg  $1\frac{1}{4}$ ; length of a leg of the third pair  $\frac{1}{6}$ .

The cephalo-thorax is compressed before, rounded on the sides, convex, glossy, with a longitudinal indentation in the medial line; it is of a pale yellow-brown colour, faintly tinged with green, and has a small black spot on each exterior angle in front, immediately above the base of the falces; the entire region of the eyes is densely covered with short hairs of brilliant whiteness, and the space between the posterior and intermediate rows has a dark brown hue. The falces are long, subconical, vertical, and, with the maxillæ and lip, are of a very pale green colour; the lip is much the darkest in the middle, its apex and the extremity of the maxillæ being tinged with pale brown. The sternum is short, broad, heart-shaped, and of a greenish-white colour; it is minutely freckled with dark brown, and has an oblong spot of the same hue at its posterior extremity. The legs are provided with short hairs and long, fine spines; they are of a yellowish-brown colour, the metatarsi and tarsi being much the darkest; the coxæ, femora and tibiæ are marked with small dark brown spots tinged with red, and a fine red line extends along the under side of each femur; the tarsi are terminated by two curved, pectinated claws. The palpi are long and of a pale yellow-brown colour, with the exception of the extremity of the radial joint and the whole of the digital joint, which have a pale reddish-brown hue; the cubital joint has a long spine at its extremity, in front; and the radial joint, which is the longer, has two long spines near the middle, one on the upper and the other on the under side, and projects an obtuse apophysis from its extremity underneath, whose outer side is fringed with long hairs; the digital joint is narrow at the base, and increases in breadth towards the extremity, which abruptly terminates in a



point; it is convex and hairy externally, concave within, except at the compact extremity, and comprises the palpal organs; these organs are moderately developed, complex in structure, with a strong, curved process on the inner side, extending to their extremity, a long and very prominent one directed outwards from the centre, which is enlarged and rounded at its extremity and has a protuberance on its anterior side, and are of a dark reddish-brown colour. The abdomen is long, slender, and somewhat cylindrical, tapering a little to the spinners; it is sparingly clothed with short, light greyish hairs, projects slightly over the base of the cephalo-thorax, and is of a green colour; on each side of the medial line of the upper part there is an obscure whitish band, on which oblique oval spots, of a pale brown hue, inclined towards each other, occur in pairs; and a short, longitudinal, pale brown streak is comprised in the anterior part of the space bounded by the bands; the branchial opercula are tinged with pale brown; a white line extends from each, along the under part, to the spinners, and the space included between them is densely freckled with white.

This handsome spider, which was comprised in a collection of *Araneidea* made in Algeria by John Gray, Esq. of Bolton, and the Rev. Hanlet Clark, in the summer of 1856, and most liberally presented to me by those gentlemen, appears to be most nearly allied to the species belonging to the genus *Philodromus* by its organization; but its habits and œconomy are not known. A striking resemblance to certain species of the genus *Sphasus* may also be observed in the disposition of its eyes.

#### GENUS SPARASSUS, Walck.

##### *Sparassus currax.*

Length of the male  $\frac{7}{10}$ ths of an inch; length of the cephalo-thorax  $\frac{1}{3}$ ; breadth  $\frac{1}{4}$ ; breadth of the abdomen  $\frac{5}{24}$ ; length of a leg of the second pair  $1\frac{7}{10}$ ; length of a leg of the third pair  $1\frac{7}{20}$ .

The legs are long, provided with hairs and sessile spines, and have a yellowish-brown hue tinged with red; the second pair is the longest, then the fourth, and the third pair is the shortest; the metatarsi and tarsi are supplied on their inferior surface with numerous dark brown hair-like papillæ constituting a climbing apparatus; and each tarsus is terminated by two curved, pectinated claws. The palpi resemble the legs in colour, with the exception of the extremity of the radial joint, from which a long, slightly curved, pointed apophysis projects on the outer side, and the oblong-oval digital joint, which are of a very dark brown colour, faintly tinged with red; the latter is convex

and hairy externally, concave within, and comprises the palpal organs; these organs are moderately developed, not very complex in structure, consisting of a convex part, membranous at its extremity, which has a yellowish-white tint, and abruptly curved at its base, the curved portion extending along the inner side of the digital joint to the extremity of its concavity; they are of a very dark brown colour. The eyes are disposed on the anterior part of the cephalo-thorax in two transverse rows, each consisting of four eyes; the two intermediate ones of the anterior row, which is the shorter and slightly curved, with its convexity directed forwards, are the largest of the eight, and the posterior row is straight. The cephalo-thorax is large, compressed before, greatly rounded on the sides, convex, hairy, with a narrow, longitudinal indentation in the medial line, and is of a reddish-brown colour. The falces are powerful, conical, vertical, and armed with teeth on the inner surface: the maxillæ are short, straight, convex near the base, and rounded at the extremity; and the lip is semicircular. These parts have a red-brown hue, that of the extremities of the maxillæ and lip being pale yellow-brown. The sternum is heart-shaped, and of a yellow-brown colour. The abdomen is oviform, hairy, and pointed at the spinners, which have a yellow-brown hue; it is of a reddish-brown colour above, a band of a paler hue, bounded by a dark brown line of variable breadth, extending more than half its length; on each side of this band there are two oblong, pale, dull, yellowish spots; and between it and the spinners a few short, curved, transverse lines of the same hue occur; the sides are spotted and streaked with dark brown, and the under part is of a pale, dull yellow colour, with four fine, dark brown lines extending the greater part of its length; the two intermediate ones are near to each other, and their posterior extremities are in contact.

The male of this species of *Sparassus* was included among the spiders collected in Algeria by John Gray, Esq., and the Rev. Hamlet Clark, in the summer of 1856.

### Family DRASSIDÆ.

#### Genus DRASSUS, Walck.

##### *Drassus micans.*

Length of the male  $\frac{1}{8}$ th of an inch; length of the cephalo-thorax  $\frac{1}{16}$ ; breadth  $\frac{1}{24}$ ; breadth of the abdomen  $\frac{1}{24}$ ; length of a posterior leg  $\frac{1}{6}$ ; length of a leg of the third pair  $\frac{1}{9}$ .

The eyes are disposed on the anterior part of the cephalo-thorax in two short, transverse, curved, concentric rows, whose

convexity is directed backwards; the interval between the intermediate eyes of the posterior row is greater than the space which separates them from the lateral ones of the same row, and the intermediate eyes of the anterior row are rather the smallest and darkest of the eight. The cephalo-thorax is oval, slightly compressed before, somewhat rounded in front, convex, glossy, with slight furrows on the sides converging towards a narrow indentation in the medial line; it is thinly clothed with short, hoary hairs, which are most abundant on the anterior part, and has three oblique rows of white hairs on each side, which converge towards its middle: the falces are conical, vertical, with a slight protuberance near the base, in front, towards the inner side, and have two very minute teeth on the inner surface: the maxillæ are powerful, enlarged where the palpi are inserted, gibbous at the base, depressed transversely near the middle, rounded at the extremity, with a small angular projection on the outer side, and inclined towards the lip, which is longer than broad, and rounded at the apex: the sternum is oval, pointed at its posterior extremity, convex and glossy. These parts are of a red-brown colour, the sternum having obscure, dark brown streaks directed from the lateral margins towards its centre. The legs are moderately long, provided with hairs, and are of a brownish-yellow colour, with the exception of the femora of the first and second pairs, which have a brownish-black hue, and the anterior side of the femora of the third and fourth pairs, which has a brown tint; the fourth pair is the longest, then the first, and the third pair is the shortest; each tarsus is terminated by two plain, curved claws, below which there is a small scopula. The palpi are slender, and, with the exception of the humeral joint, which is of a brownish-black colour, have a brownish-yellow hue, faintly tinged with red; the cubital and radial joints are short, and the latter, which is the larger, projects a small, pointed apophysis from its extremity, on the outer side; the digital joint is of an oblong-oval form, compact and pointed at the extremity, convex and hairy externally, concave within, comprising the palpal organs, which are well developed, prominent, not very complex in structure, with a process near the middle which is directed forwards, and are of a mingled red-brown and brownish-yellow colour. The abdomen is oviform, glossy, clothed with short hairs, convex above, and projects a little over the base of the cephalo-thorax; it is of a deep black hue, but iridescent, reflecting bright tints of green, purple and copper when viewed in a strong light; the branchial opercula and the medial line of the under part are of a brown colour, and the extremities of the superior and inferior spinners have a somewhat darker shade; there is also a curved transverse line immediately below the



branchial opercula, and a small spot just above the spinners, which are composed of white hairs.

An adult male of this minute *Drassus* was found in Dorsetshire by O. P. Cambridge, Esq., in the autumn of 1857, and was forwarded to me in February 1858 by Mr. R. H. Meade.

### Family THERIDIIDÆ.

#### Genus PHOLCUS, Walck.

##### *Pholcus ruralis.*

Length of the male  $\frac{1}{4}$ th of an inch; length of the cephalo-thorax  $\frac{1}{10}$ ; breadth  $\frac{1}{12}$ ; breadth of the abdomen  $\frac{1}{2}$ ; length of an anterior leg  $1\frac{7}{10}$ ; length of a leg of the third pair  $\frac{9}{10}$ .

The cephalo-thorax is almost circular, somewhat convex, glossy, and has a large indentation in the medial line; the anterior part, on which the eyes are seated, is prominent, and the space between those organs and the falces is broad and nearly vertical; it is of a pale yellow-brown colour, the anterior slope of the indentation being the brownest. The eyes are placed on black spots; the two intermediate ones are much the smallest of the eight, and are situated transversely between three large ones on each side, closely grouped in the form of a triangle. The falces are small, vertical, cubconical, united at the base, armed with a short, slightly curved fang, and have a single strong tooth at their extremity, on the inner side, and a minute, pointed, dark process in front, near the articulation of the fang: the maxillæ are long, and taper to the extremity; they are greatly enlarged at the base, where the palpi are inserted, and inclined towards the lip, which is short, broad, somewhat dilated in the middle, and rounded at the apex. These parts have a brown hue, the lip being much the darkest, and the falces and enlarged base of the maxillæ the palest. The sternum is heart-shaped, and of a brownish-black colour. The legs are very long, slender, and provided with fine hairs, and the femora and tibiæ of the anterior pair have a longitudinal row of short, erect spines on their under side, except at the base of the former and extremity of the latter; they are of a yellow-brown hue; a brown annulus occurs near the whitish extremity of the femora and tibiæ, and the genual joint has a brown hue; the first pair is the longest, then the second, and the third pair is the shortest; each tarsus is terminated by three claws; the two superior ones are curved and pectinated, and the inferior one is inflected near its base. The palpi have a pale yellow-brown colour, with the exception of the termination of the digital joint, which has a reddish-brown tint; the humeral joint is slender at its base, from which an obtuse process projects on the outer side, and is gibbous under-

neath at its greatly enlarged extremity; the radial joint is dilated, convex above, and much larger than the cubital joint; the digital joint is long, enlarged and convex at its base, particularly towards the inner side, and tapers to its extremity, near which there is a prominent, pointed, black process on the outer side; the palpal organs are connected with the inferior surface of the enlarged base of this joint, towards the inner side; they are moderately developed, not very complex in structure, subglobose, with a strong terminal process, which is crescent-shaped at its extremity, and are of a pale yellow-brown colour, that of the extremity of the terminal process being dark reddish-brown. The abdomen is somewhat cylindrical, sparingly clothed with short hairs, and of a dark brown colour faintly tinged with olive-green, the sides of the under part being the palest: it is marked with numerous dull yellow spots; and a short, dark red-brown, fusiform band, having a small angular point on each side, near the middle, occurs in the medial line of the anterior region of the upper part: on each side of the posterior extremity, above the spinners, there is a short, oblique, slightly curved, black line; a broad black band, tinged with reddish-brown at its extremities, extends along the middle of the under part, and the branchial opercula are of a pale dull yellow colour; the part comprised between them is protuberant, and in connexion with the posterior extremity of the protuberance a small, prominent, semicircular, yellowish-white process is situated.

This *Pholcus*, which was comprised in the collection of Algerian spiders received from Messrs. Gray and Clark, resembles the *Pholcus impressus* of M. Koch in several particulars, but is quite distinct from that species.

*Pholcus pallidus.*

Length of the female  $\frac{5}{4}$ ths of an inch; length of the cephalo-thorax  $\frac{1}{16}$ ; breadth  $\frac{1}{16}$ ; breadth of the abdomen  $\frac{1}{12}$ ; length of an anterior leg  $1\frac{1}{2}$ ; length of a leg of the third pair  $\frac{1}{2}\frac{7}{4}$ .

The legs are very long, slender, provided with fine hairs, without spines, and are of a yellowish-brown colour; a brown annulus occurs near the whitish extremity of the femora and tibiæ, and the genual joint has a brown hue; the first pair is the longest, then the fourth, and the third pair is the shortest; each tarsus is terminated by three claws; the two superior ones are curved and pectinated, and the inferior one is inflected near its base. The cephalo-thorax is circular, glossy, somewhat convex, and has a large indentation in the medial line; the anterior part, on which the eyes are seated, is prominent, and the space between



those organs and the falces is broad and nearly vertical; it is of a yellowish-white colour, the lateral margins, a streak directed from each intermediate eye to the frontal margin, two irregular confluent spots on each side, and a broad band extending along the middle, having a dark brown hue. The eyes are placed on black spots; the two intermediate ones are much the smallest of the eight, and are situated transversely between, or rather slightly in advance of, the three large ones on each side, which are closely grouped in the form of a triangle. The falces are small, vertical, subconical, united at the base, armed with a short, slightly curved fang, and have a single strong tooth at their extremity, on the inner side: the maxillæ are long, and taper to the extremity; they are greatly enlarged at the base, where the palpi are inserted, and inclined towards the lip: the palpi are short, and provided with long hairs. These organs have a pale yellow-brown hue, the maxillæ being the palest. The lip is short, broad, somewhat dilated in the middle, and rounded at the apex; and the sternum is heart-shaped. These parts are of a dark brown hue, the apex of the lip having a yellowish-brown tint. The abdomen is of an oblong oviform figure, sparingly clothed with short hairs, and of a pale yellowish-white colour; at the anterior extremity of the upper part there are two short, obscure, brownish streaks directed backwards; these are followed by a faint, fusiform, longitudinal band of the same hue, which is bifid at its posterior extremity; it is succeeded by a double series of oval, brownish-black spots disposed in pairs and inclined towards each other; immediately above the spinners there is a pale yellowish-white space bounded by an irregular, brownish-black line, and on the upper part of the sides curved lines of the latter hue occur; the anterior extremity of the under part has a dark brown hue, and three bands of the same colour extend along the middle; the intermediate one is narrower and shorter than the two exterior ones, which are greatly contracted near the spinners, where a pale yellowish-white space occurs, bounded by the extremities of the three medial bands; the sexual organs are prominent, and of a reddish-brown colour.

I am indebted to Mr. Eyton Williams of Denbigh for this remarkable *Pholcus*, which he captured in Pernambuco. It differs from the known species of the genus to which it belongs in having the posterior legs decidedly longer than those of the second pair,—a character constituting an additional bond of alliance to those previously known to connect the spiders of this small group with those of the genus *Artema*.